

Claims

1. A transaction authorisation system comprising:
a user interface unit capable of accepting a transaction authorisation; and,
5 a utility meter provided at a location having an associated location identifier unique to the location,
wherein the utility meter is arranged to communicate with the user interface unit, to obtain a transaction authorisation, and to transmit an authorisation request based on the transaction authorisation and location identifier to obtain authorisation of the
10 transaction.
2. A transaction authorisation system according to claim 1, further comprising a communication unit arranged to communicate with an authorisation authority, wherein the utility meter is arranged to submit the authorisation request to the
15 communication unit for communication to the authorisation authority to obtain authorisation of the transaction.
3. A transaction authorisation system according to claim 2, in which the utility meter is arranged to submit utility usage data to the communication unit.
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4. A transaction authorisation system according to claim 2, comprising a further utility meter provided at the location, wherein said further utility meter is arranged to submit utility usage data to the communication unit.
- 25 5. A transaction unit according to claim 4, in which said further utility meter is arranged to submit the utility usage data to said utility meter for submission to the communication unit.
6. A transaction authorisation system according to claim 4, in which said
30 further meter is a gas or water meter.

7. A transaction authorisation system according to claim 1, in which the utility meter is an electricity meter.

8. A transaction authorisation system according to claim 3, in which the communication unit is arranged to communicate utility usage data to a utility supplier.

9. A transaction authorisation system according to claim 3, in which the communication unit communicates with one or more utility suppliers via a central control system.

10. A transaction authorisation system according to claim 2, in which the authorisation authority comprises a central control system, wherein the central control system processes received authorisation requests and submits the requests to appropriate banking authorities for fulfilment.

11. A transaction authorisation system according to claim 2, in which the communication unit is a modem.

12. A transaction authorisation system according to claim 2, in which the user interface unit is the communication unit.

13. A transaction authorisation system according to claim 12, wherein the user interface unit is a telephone.

14. A transaction authorisation system according to claim 4, in which the user interface unit and the utility meter communicate with each other via RF signals.

15. A transaction authorisation system according to claim 4, in which the communication unit and the utility meter communicate with each other via RF signals.

16. A transaction authorisation system according to claim 6, in which the further utility meter communicates via RF signals.

17. A transaction authorisation system according to claim 2, in which the user interface unit includes a card reader device, wherein the card reader device is arranged to read data from a card to be charged for the transaction, the user interface unit processing the data read from the card to form at least a part of a transaction authorisation.

18. A transaction authorisation system according to claim 3, in which the user interface unit includes a keyboard, wherein the user interface unit is arranged to accept data entered via the keyboard to form at least a part of a transaction authorisation.

19. A transaction authorisation system according to claim 3, in which the utility meter includes a memory for storing a user's banking data, wherein the user interface unit is arranged to accept an input from the user authorising use of at least part of the banking data, the utility meter then using the at least part of the banking data to form at least a part of a transaction authorisation.

20. A transaction authorisation system according to claim 3, in which the user interface unit includes a display, wherein the user interface unit is arranged to display on request utility usage data from the utility meter.

21. A transaction authorisation system according to claim 3, in which the user interface unit is connectable to a computer, wherein the user interface unit, when connected to a computer, is operative to make necessary transaction authorisation requests in response to electronic transactions initiated on the computer.

22. A transaction authorisation system according to claim 3, in which the transaction is a financial transaction.

23. A transaction authorisation system according to claim 3, in which the user interface device is remote from the utility meter.

24. A transaction authorisation system according to claim 4, further comprising a
5 digital cellular transceiver arranged to communicate with the utility meter for transmitting data to, and receiving data, from a remote source.

25. A transaction authorisation system according to claim 24, in which the transceiver is the communication unit.

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26. A transaction authorisation system according to claim 24, further comprising a switching unit controllable by the utility meter for switching one or more appliances on or off, wherein when the utility meter receives a signal via the transceiver indicating the availability of cheap-rate energy it is arranged to control
15 the switching unit to switch appliances on.

27. A transaction authorisation system according to claim 3, in which the transaction authorisation comprises data relating to a transaction and an authorisation to complete the transaction.

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28. A method of making a transaction using the transaction authorisation system of claim 3, comprising the steps of requesting goods or services for which payment is required and entering a transaction authorisation via a user interface unit, wherein the transaction authorisation is communicated by the utility meter to effect payment
25 for the transaction.

29. An energy supply system including a utility meter, a switching unit controllable by the utility meter provided at a location for switching appliances on and off and a communication unit, the utility meter having an associated location
30 identifier unique to the location, the utility meter being arranged to communicate with a remote system via the communication unit, the remote system having a database of the unique identifiers, wherein upon determination or prediction of an

energy surplus or shortage the remote system is arranged to select appropriate locations to switch appliances on or off to meet the surplus or shortage, for each selected location the remote system determining the location's unique identifier from the database and communicating control data for the location's switching unit to the location's utility meter via the location's communication unit using the location's unique identifier.

30. A system according to claim 29, in which each communication unit includes data for use in initiating communication with the communication unit, the data being stored in the database and being linked to the unique identifier for the location of the communication unit, wherein the remote system uses the unique identifier to obtain the data to initiate communication with the communication unit.

31. A pre-payment energy supply system including a pre-payment utility meter, and a communication unit provided at a location, the utility meter having an associated location identifier unique to the location and a memory for storing pre-payment credits, the utility meter being arranged to communicate with a remote system via the communication unit, the remote system having a database of the unique identifiers, wherein a payment for crediting to a meter includes the unique identifier, the remote communication unit being responsive to a payment to initiate communication with the communication unit of the location using the unique identifier and to add appropriate pre-payment credits to the memory.

32. A system according to claim 31, in which upon pre-payment credits in the memory reaching or falling below a predetermined level, the utility meter is arranged to communicate with a predetermined authority to obtain emergency credits.

33. A system according to claim 31, in which each communication unit includes data for use in initiating communication with the communication unit, the data being stored in the database and being linked to the unique identifier for the location of the

communication unit, wherein the remote system uses the unique identifier to obtain the data to initiate communication with the communication unit.

34. A method of controlling the provision of energy to users having a pre-payment energy supply meter and a communication unit provided at a location, the utility meter having an associated location identifier unique to the location and a memory for storing pre-payment credits, the method comprising the steps of communicating with the utility meter via the communication unit and writing pre-payment credits to the memory.

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